



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/540,542

06/24/2005

Michael R. Bonner

SSY-104-B

7185

48980 7590 05/11/2009  
YOUNG & BASILE, P.C.  
3001 WEST BIG BEAVER ROAD  
SUITE 624  
TROY, MI 48084

EXAMINER

FLANIGAN, ALLEN J

ART UNIT

PAPER NUMBER

3744

NOTIFICATION DATE

DELIVERY MODE

05/11/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@youngbasile.com  
audit@youngbasile.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/540,542	<b>Applicant(s)</b> BONNER ET AL.	
	<b>Examiner</b> Allen J. Flanigan	<b>Art Unit</b> 3744	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9 and 19-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, as the claim now recites plural profiles, it is not clear which of the recited profiles “said fluid transfer profile” in line 7 refers to. Regarding claim 19, there is no proper antecedent basis for “the mounting means” recited in claim 19.

Claims 19 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dunning et al.

The various layers 84a-84d that make up the flexible cover with embedded pipes of Dunning et al. are disclosed as being formed from “vinyl backed nylon material”, for example; which is understood to be a nylon fabric material coated with vinyl. Thus, the Dunning et al. cover reads on the claimed “flexible fabric cover”. Note that each of the pipe profiles 80 will comprise a concave wall surface on its interior. Regarding the “means for connecting”, note uppermost layer 84a that is stitched to the laminate as shown in Fig. 8. Regarding claim 21, see Fig. 9.

Claims 1, 2, 7-12, 18, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horner, particularly in view of Collito.

Please see the comments made in regard to the rejection of claim 2 in the previous Office action.

Claims 3, 5, 6, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunning et al. in view of Collito.

Collito discloses the exchange of heat between a cylindrical conduit and external tubes abutting the outer surface of the conduit. They teach that “to provide maximum surface area to effect” heat exchange, the portion of the outer tubes facing the inner conduit can be concavely shaped to match the profile of the conduit outer surface (column 2 of Collito). Thus, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to shape a portion of pipes 80 of Dunning et al. in similar fashion to enhance heat transfer between the fluids in the conduits. Regarding claim 15, note hook and loop elements 86a, 86b employed to join the edges of the cover 29 together. Regarding claims 16 and 17, see Fig. 5 of Dunning et al.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunning et al. in view of Stine et al.

Stine et al. shows a heat exchange arrangement similar to Dunning et al. in which one or more tubes surround a conduit for temperature control purposes; Stine et al. disclose that it is known in the art to surround such arrangements with an insulating layer to limit thermal energy loss. In view of this, it would have been obvious to one of ordinary skill in the art at the time

the instant invention was made to do the same in Dunning et al., employing a layer of insulation to reduce such energy losses.

Applicant's arguments filed 2/17/2009 have been fully considered but they are not persuasive or are moot in view of the new grounds of rejection.

The language added to claim 1 regarding plural profiles fails to distinguish; as noted in the previous Office action, Horner suggests the possibility of additional profiles; moreover, the recitation regarding the profile exterior surface being concave in claims 1 and 24 does not clearly distinguish over Horner in that the heat transfer cement 3 with embedded pipe 2 that contacts the exterior of the conduit reads on the claimed "profile".

Claims 4, 20, and 22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the

Art Unit: 3744

advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allen J. Flanigan/  
Primary Examiner, Art Unit 3744